

ABSTRACT

A system and method is provided to facilitate the transmission of scalable coded video over IP networks. A proposed pre-processing method is disclosed, referred to as multi-track hinting, efficiently structures layered video into a flexible format so that it can be easily streamed over packet-switching networks in accordance with changing network conditions, complexity constraints and user preferences. A general purpose MPEG server, without major modification, is capable of automatically using multiple channels (i.e., RTP connections), thereby providing the streaming system the flexibility to adapt to changing network conditions, complexity constraints and user preferences by adjusting the number of scalable layers to be transmitted. Accordingly, the multi-track hinting method extends the functions of standard Internet streaming protocols (RTSP, SDP) to enable flexible adaptation.